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April 20, 2005

**Via HAND DELIVERY**ENTERED  
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APR 26 2005

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The Honorable Vernon A. Williams  
Secretary  
Surface Transportation Board  
1925 K Street, NW  
Washington, DC 20423

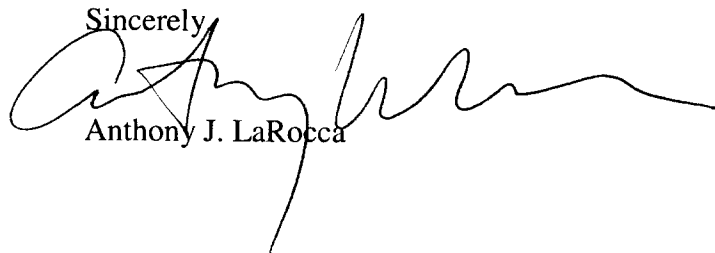
Re: **Rail Rate Challenges Under The Stand-Alone Cost Methodology,  
STB Ex Parte No. 657**

Dear Secretary Williams:

BNSF Railway Company advised the Board on April 14, 2005 that three persons will appear on behalf of BNSF at the hearing on April 26, 2005 to consider rail rate challenges under the SAC methodology. As indicated in BNSF's April 14, 2005 letter, the following persons will appear on behalf of BNSF: John P. Lanigan, BNSF's Executive Vice President and Chief Marketing Officer; Joseph P. Kalt, Ford Foundation Professor of International Political Economy at the John F. Kennedy School of Government, Harvard University; and Samuel M. Sipe, Jr., Steptoe & Johnson, LLP, outside counsel for BNSF. Pursuant to the Board's March 14, 2005 Notice, attached are the original and 10 copies of the written testimony for each of the three BNSF witnesses. Please note that these materials include documents in color.

Please date stamp the extra copy of this letter and return it with our messenger. If you have any questions regarding this matter, please contact the undersigned.

Sincerely,



Anthony J. LaRocca

cc: Raymond A. Atkins

**Hearing Before the Surface Transportation Board  
April 26, 2005**

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**Ex Parte 657**

**RAIL RATE CHALLENGES UNDER THE  
STAND-ALONE COST METHODOLOGY**

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**Statement of  
John P. Lanigan**

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My name is John P. Lanigan. I am BNSF's Executive Vice President and Chief Marketing Officer. I appreciate this opportunity to appear on behalf of BNSF Railway Company to discuss the Board's treatment of rate reasonableness cases.

The Board's decision to hold a hearing on the subject of rate reasonableness challenges is timely. BNSF has been a defendant in eight rate cases filed since the summer of 2000. These cases raise numerous legal issues that I will leave to Professor Kalt and Mr. Sipe to discuss. I would like to discuss the importance of these cases to BNSF and the importance of the Board's rate reasonableness standards to BNSF's ability to maintain and expand the railroad network. The Board is well aware that demand for rail service is increasing dramatically. Rail capacity is becoming extremely tight for the first time since 1979. It is particularly important that the Board not give in to the short-sighted requests for rate reductions by coal shippers at a time that BNSF's revenue needs are growing and the market is demanding additional capital investment.

Railroads are capital intensive. As a percentage of revenue, the railroad industry's capital expenditures significantly exceed those of its customers. (Exhibit 1) About half of our capital

spending goes to maintain the rail network. An increasing portion of our capital is being spent to expand the network in response to growing demand. (Exhibit 2)

There are limited sources of revenues that can be used to fund these capital investments. It has been well documented that rail transportation rates have declined substantially since the early 1980s. (Exhibit 3) This decline in coal rates shows that there are strong and diverse sources of competition in the market that limit BNSF's ability to generate the revenues needed to maintain and expand the costly rail infrastructure. If shippers are able to use rate litigation to keep rates artificially low, when growing demand would support higher rates, there are few other areas where BNSF can generate the needed revenues.

Coal transportation is an important part of BNSF's business. Coal transportation represents about 21 percent of our total revenues and over a third of our revenue ton-miles. (Exhibit 4) Coal transportation is particularly important to western railroads. (Exhibit 5) Last year BNSF handled over 250 million tons of coal.

The demand for coal transportation is increasing dramatically. PRB coal production has gone from about 100 million tons per year in 1980 to nearly 500 million tons in 2004. (Exhibit 6) In the last couple of years alone, BNSF has seen the demand for coal transportation skyrocket. The average number of coal trainsets in service has gone from about 270 in January 2003 to almost 390 in December 2004. (Exhibit 7) Further growth is almost certain. Eastern utilities are looking increasingly to PRB coal to address emissions concerns associated with eastern coal. Numerous PRB test burns have been conducted and more are planned. (Exhibit 8)

What does this mean for coal transportation rates? Increasing demand means that rates should be going up, particularly when large amounts of additional capital are needed to satisfy this increasing demand. Coal shippers are high consumers of a railroad's capital. Heavy coal

trains require high levels of maintenance. As I showed earlier, about half of our annual capital expenditures go to maintaining the rail network. In addition, BNSF has invested heavily in state-of-the-art locomotives that are dedicated to our coal shippers. In light of the growing demand for coal transportation and the need for increasing investment in coal-related infrastructure, coal shippers cannot reasonably expect rail rates to continue their two-decades long decline.

The amount of revenue that is at stake in coal rate cases is very large. In the 1996 West Texas Utilities decision, the Board ordered BNSF to reduce its rates by 31 percent. WTU's successor, AEP Texas, has returned to the Board asking for further rate reductions. In the 1998 Arizona Public Service decision, the Board ordered a 44 percent rate reduction. BNSF has estimated that the Arizona Public Service rate prescription cost BNSF between \$55 and \$60 million by the time the rate prescription was removed late last year. Last month BNSF was ordered to pay reparations to Xcel Energy of over \$11 million. Otter Tail, AEP Texas and Basin Electric are asking for substantial additional reparations in their cases in the tens of millions of dollars.

BNSF does not believe that these shippers are entitled to any rate relief, but BNSF must consider the large amounts of revenue at risk when it makes pricing decisions. Coal shippers are sophisticated customers of rail transportation service. They regularly threaten to file rate litigation in our contract discussions in an effort to obtain rate concessions. BNSF has taken these threats seriously. One reason that coal rates have steadily declined is that BNSF has often sought to avoid the substantial risks of litigation by agreeing to reduced rates in contract negotiations.

But now, more than ever, the Board must be careful not to impose artificial rate caps through rate regulation. The Board should not prevent BNSF from earning the revenues needed

to maintain and expand the railroad network. As coal demand increases, the need for additional capacity is stronger than ever. BNSF has historically reinvested its revenues in rail infrastructure, so any artificial limits on the revenues BNSF can earn will only reduce the investments we are able to make. The entire community of shippers that we serve would be adversely affected.

Coal shippers have been the beneficiaries of our capital infrastructure investments. From 1994 through 2004, BNSF invested \$2.4 billion in coal-related capacity. BNSF is investing another \$216 million this year alone in coal capacity. (Exhibit 9) In 2004 and 2005, BNSF will have acquired 23 additional coal train sets and 117 AC locomotives for our coal shippers. A triple-track expansion of the Joint Line in the PRB between Walker and Shawnee will be completed in 2005.

The need for capital investments in coal-related capacity is growing at a fast pace. The Department of Energy's EIA estimates that western coal production will increase 350 million tons from 2002 to 2025. 280 million tons of that new coal production will come from the PRB. (Exhibit 10) BNSF expects that this will result in 26 additional trainloads of PRB coal per day. Substantial new capital expenditures will be needed to meet this tremendous growth. BNSF estimates that it will need to spend between \$500 and \$800 million expanding track and terminal capacity to handle this increased coal traffic. BNSF will need to spend between \$1 billion and \$1.2 billion on additional AC locomotives and between \$1.2 and \$1.3 billion on additional aluminum trainsets. (Exhibit 11).

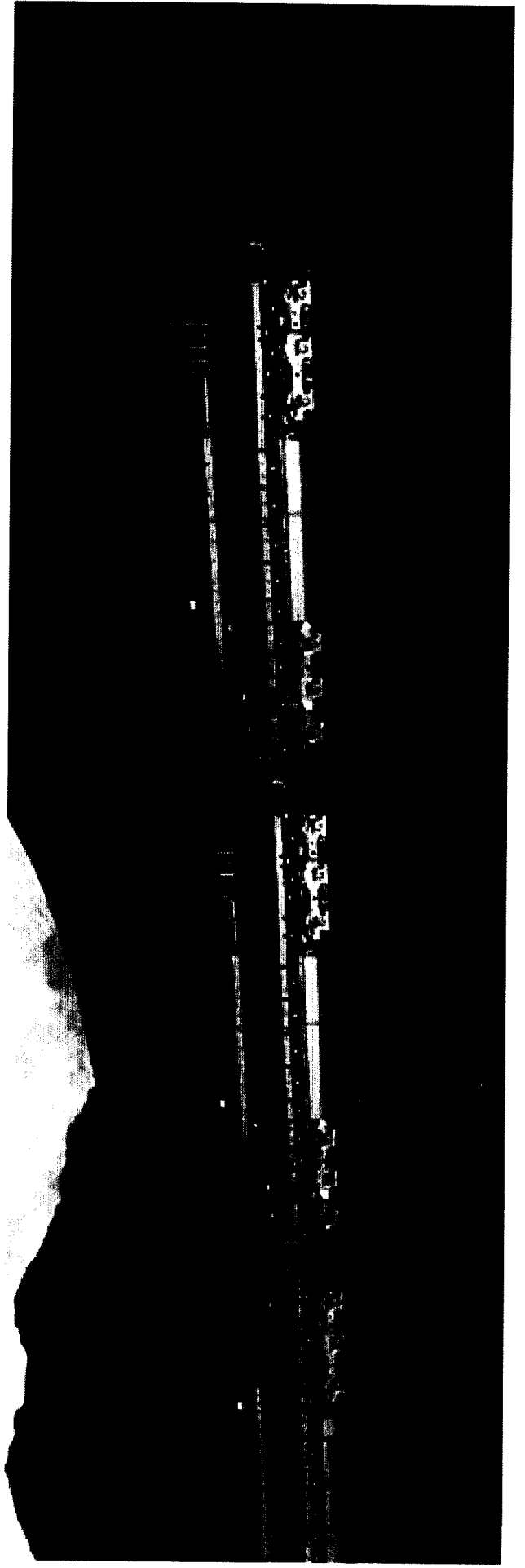
The Board must protect the interests of all shippers in having a rail network capable of meeting this growing demand. BNSF therefore urges the Board to apply its rate reasonableness

standards in a way that protects legitimate claims by shippers without becoming an obstacle to the necessary expansion of the rail network.

# BNSF Railway

Challenges to Railroad Rates Under the "Stand-Alone Cost" Methodology  
Hearing Before The Surface Transportation Board, April 26, 2005

John Lanigan  
Executive Vice President and Chief Marketing Officer



# Railroads Are Capital Intensive

Exhibit 1

All manufacturing	3.8%
Food	2.7%
Transportation equipment	3.0%
Wood products	3.2%
Machinery	3.3%
Primary metal products	3.8%
Paper	4.9%
Chemicals	4.9%
Utilities	13.9%
Railroads	16.0%

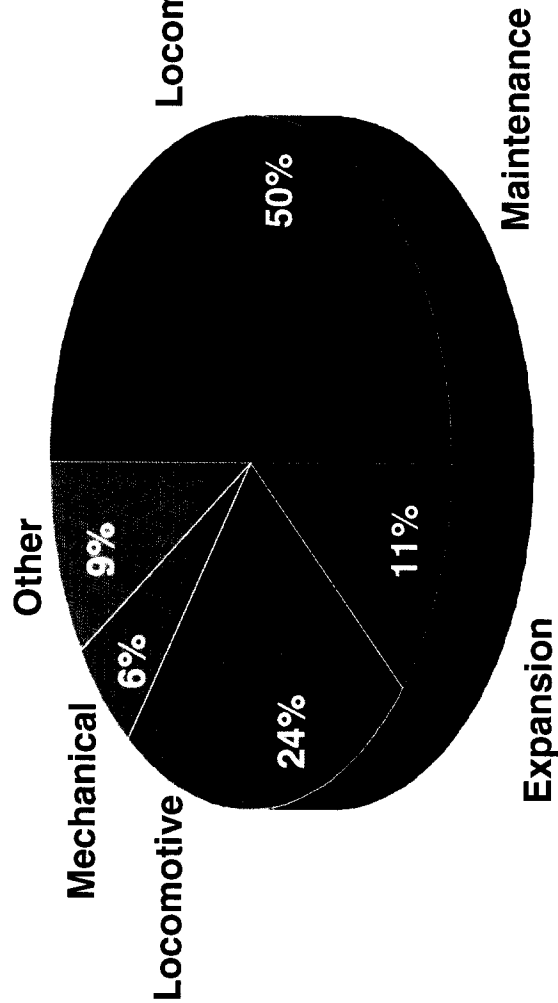


# An Increasing Portion of Capital Expenditures Is For Expansion of Capacity

Exhibit 2

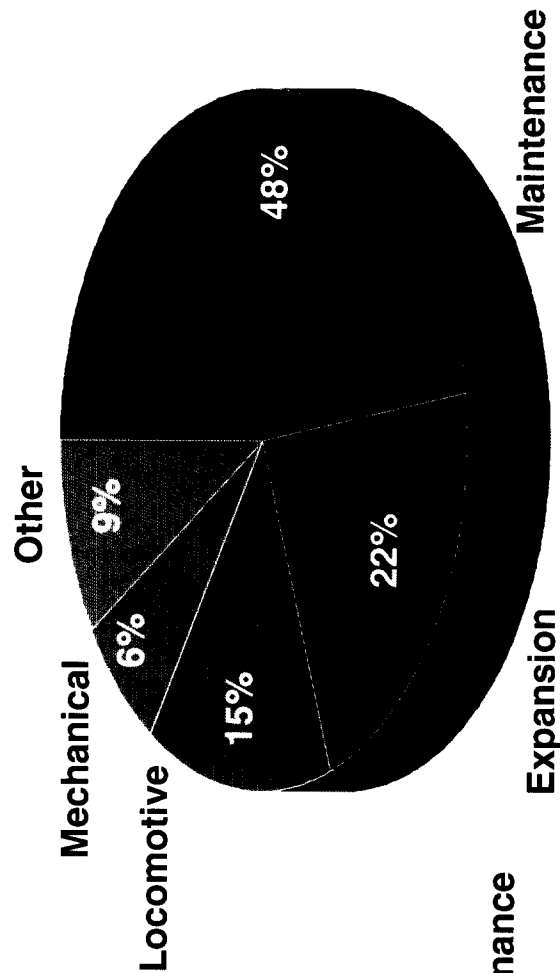
2004 Total

(\$1.99 billion)



2005 Total

(~ \$2 billion)



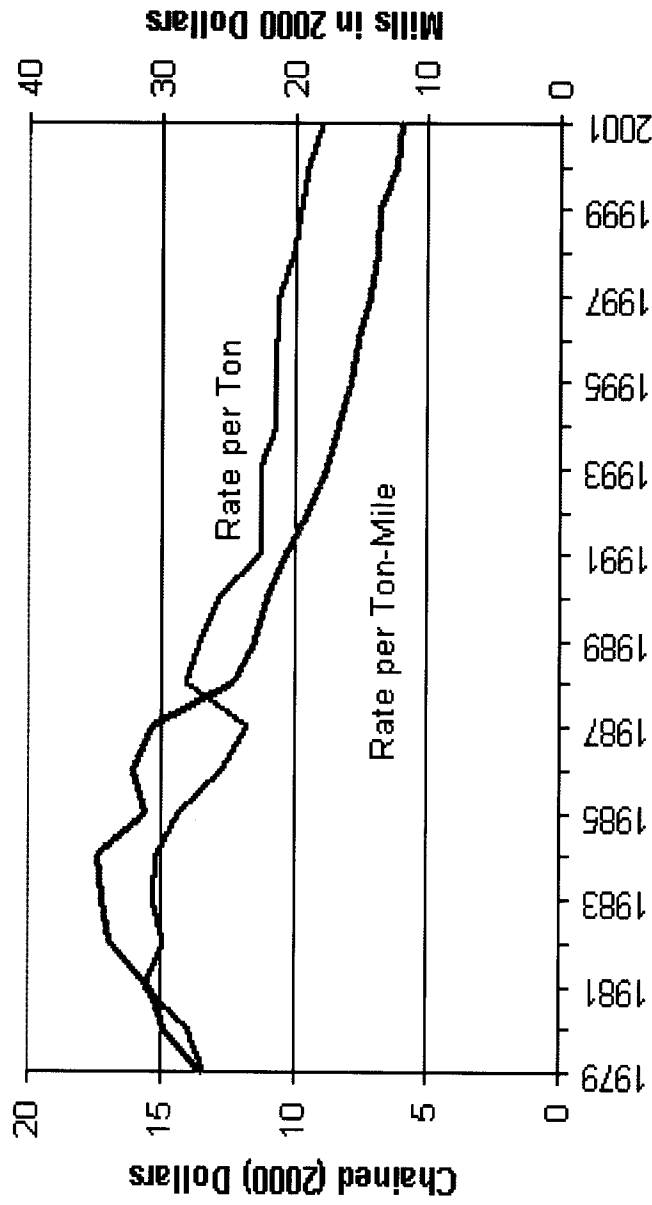
# Coal Transportation Rates Have Declined Dramatically Since 1979

Taken From EIA 2004 Study:

Coal Transportation: Rates and Trends in the United States, 1979-2001  
(with Supplementary Data to 2002)

Exhibit 3

Figure S1. Trends in Coal Transportation Rates, 1979-2001



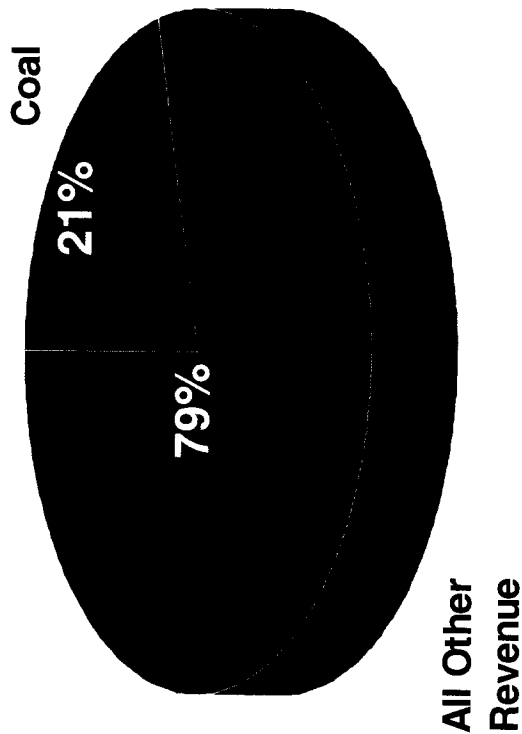
Source: Energy Information Administration, Coal Transportation Rate Database, April 2004. Chained (2000) dollars are calculated by using gross domestic product implicit price deflators.

# Coal Is An Important Source of Revenue

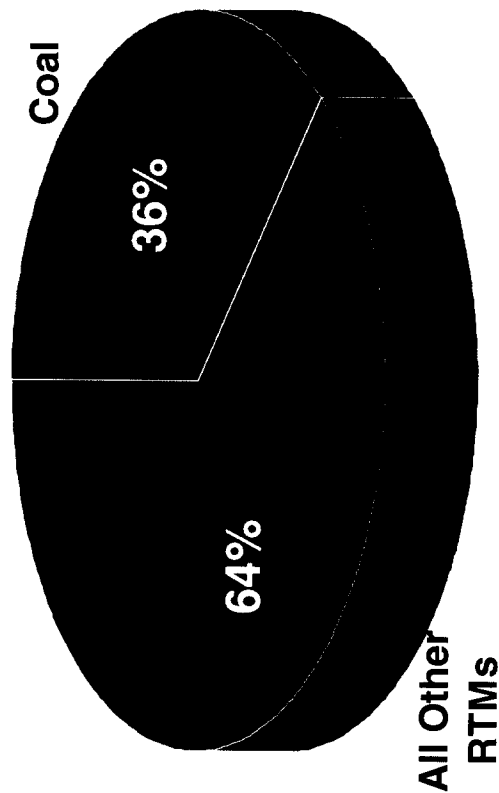
Exhibit 4

Coal represents 21% of RR revenue and 36% of revenue ton miles

Coal as a Percent  
of Total Revenue



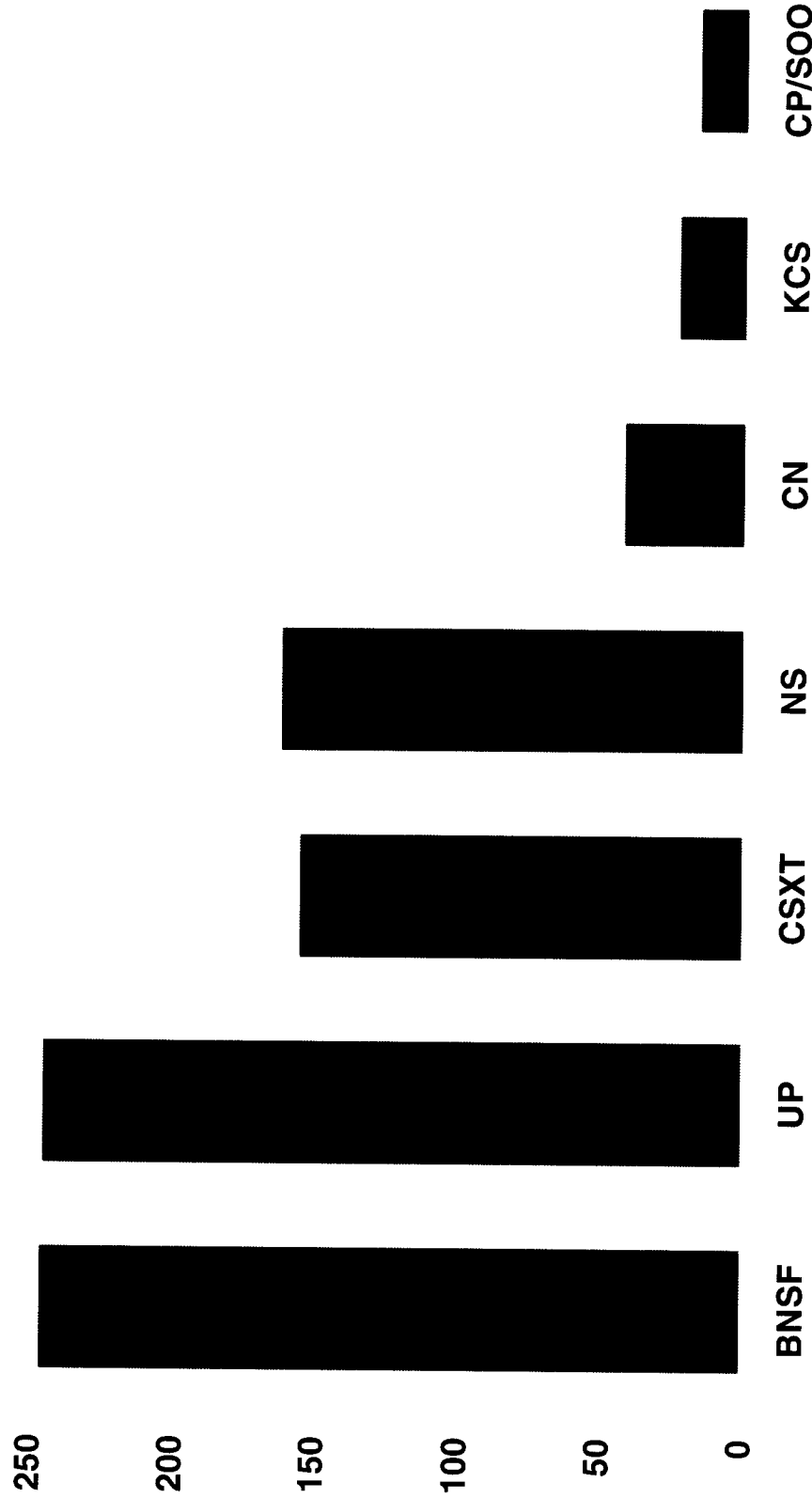
Coal as a Percent  
of Total Revenue Ton Miles



# Coal Is A Key Commodity for the Rail Industry

Exhibit 5

Million Tons

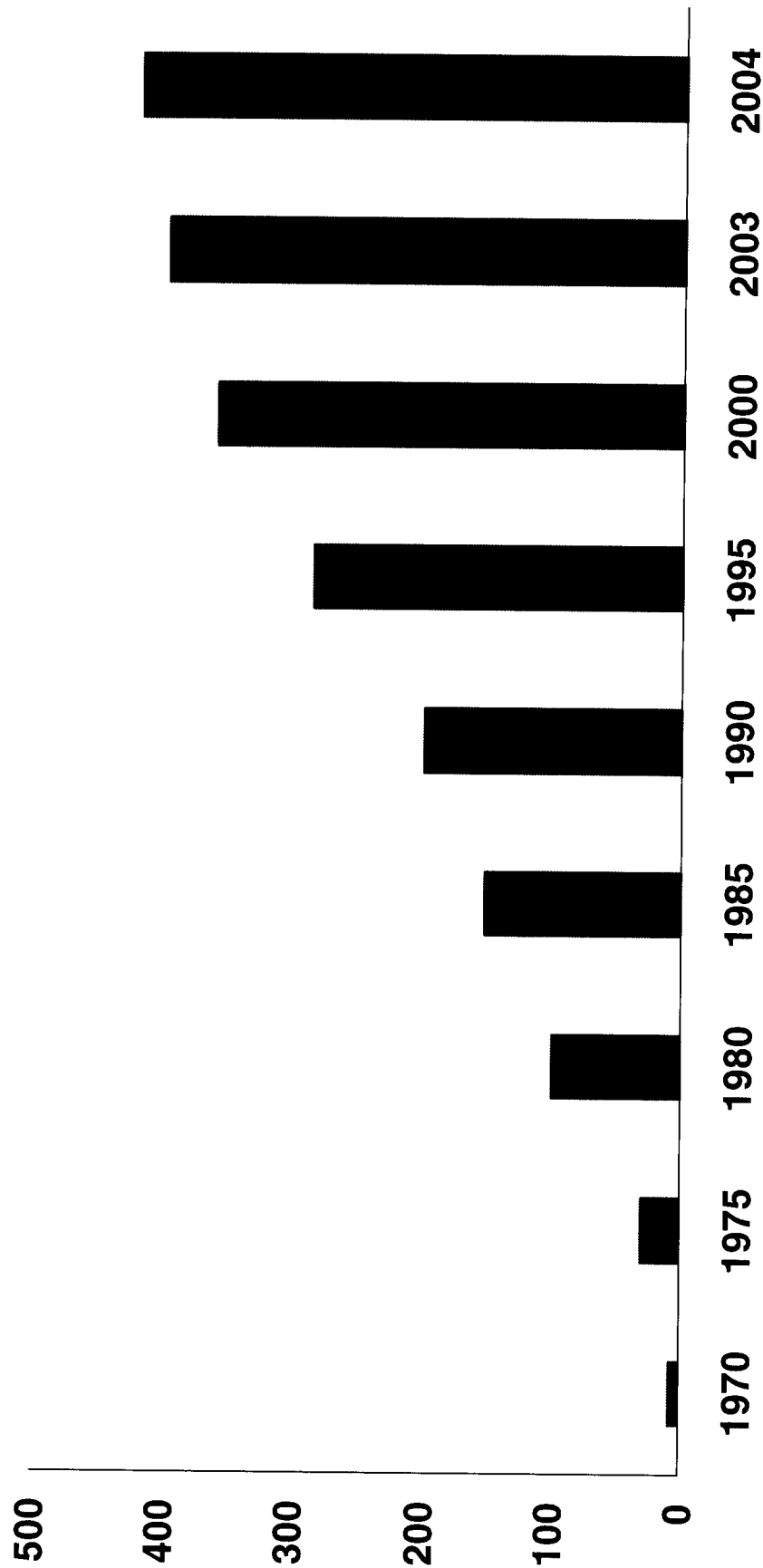


**BNSF**  
RAILWAY

# PRB Coal Production Has Increased Dramatically

Exhibit 6

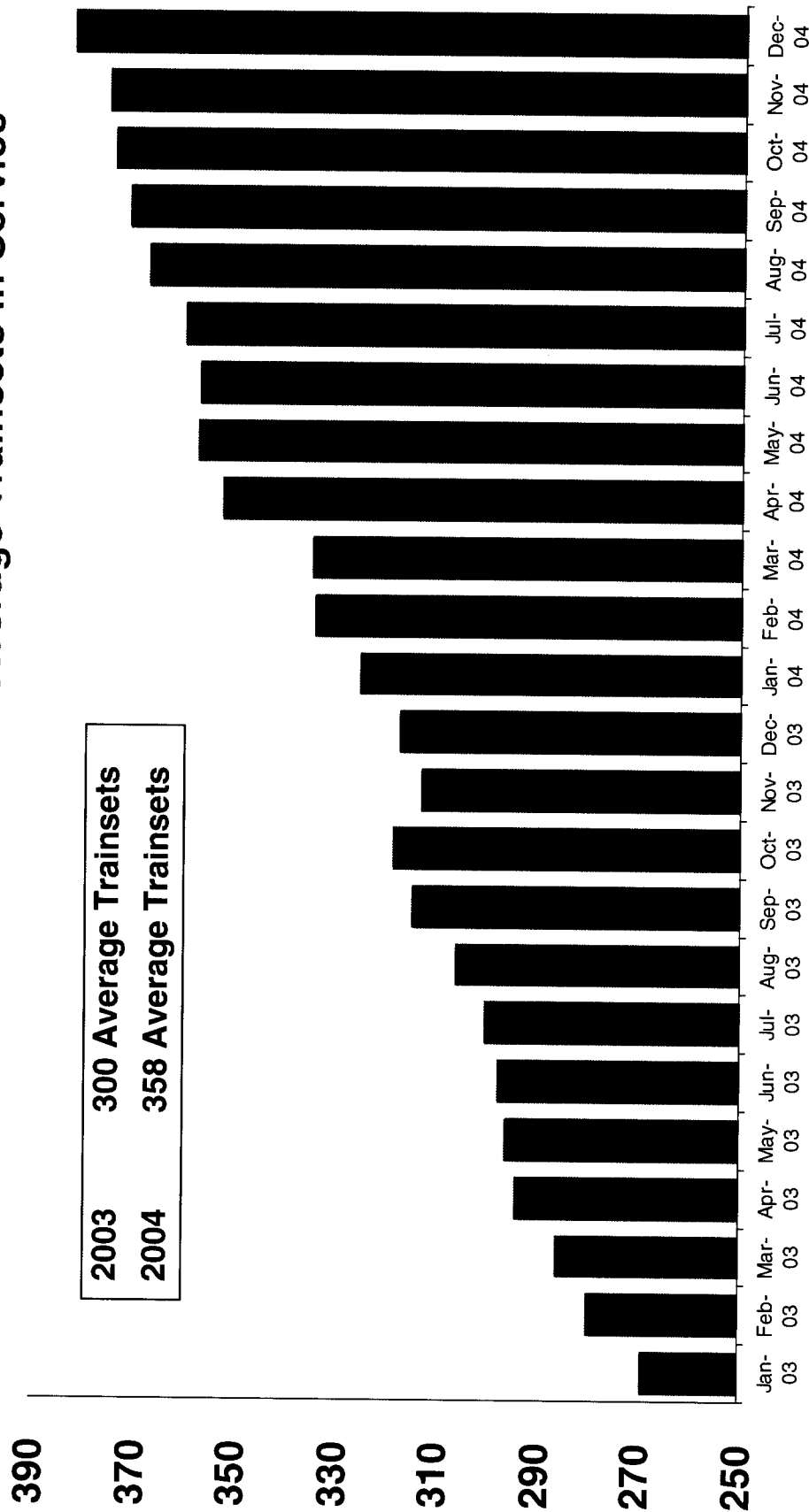
Million Tons



# BNSF Average Monthly Coal Trainsets in Service Have Increased Since January 2003

Exhibit 7

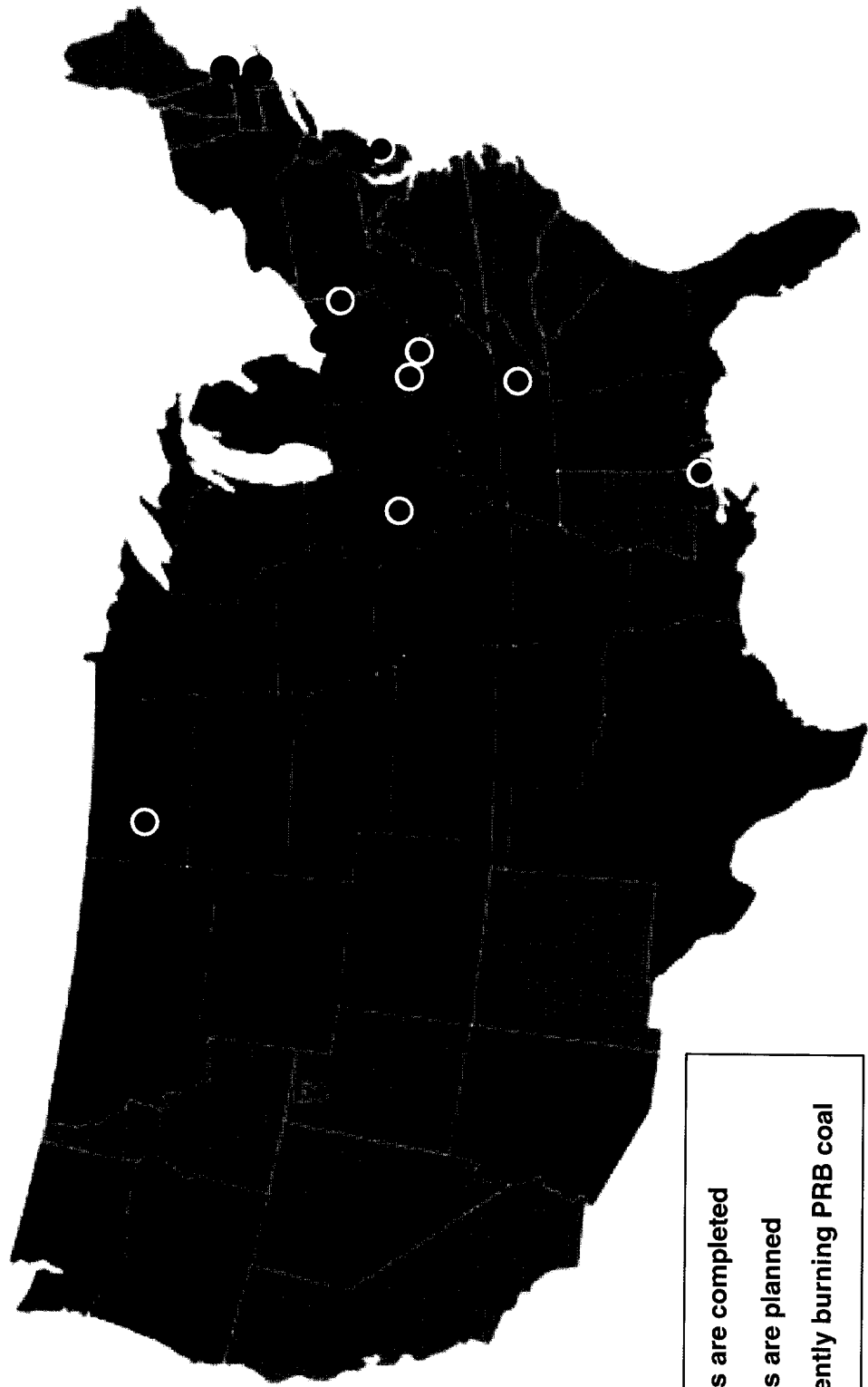
Average Trainsets in Service



# Demand for PRB Coal Continues to Grow

## PRB Test Burns

Exhibit 8



**BNSF**  
RAILWAY

# BNSF Has Made Substantial Coal Capacity Investments

\$2.4 billion invested through 2004  
\$216M planned for 2005

Exhibit 9

\$ Millions

Year	Loco- motives	Cars	Joint line	Corridors	Terminals	Total
1994	\$247	\$22	\$13	\$10	\$2	\$294
1995	247	58	18	44	12	379
1996	118	19	19	41	22	219
1997	160	20	7	63	27	277
1998	235	22	8	134	17	416
1999	270	23	13	49	4	359
2000	56	0	0	13	1	70
2001	0	0	0	0	0	0
2002	0	0	0	0	0	0
2003	85	48	0	8	10	151
2004	102	104	15	5	17	243
2005F	<u>82</u>	<u>85</u>	<u>5</u>	<u>18</u>	<u>26</u>	<u>216</u>
Total	\$1,602	\$401	\$98	\$385	\$138	\$2,624

**BNSF**  
RAILWAY



# **EIA Projects Large Increases in PRB Coal Demand Through 2025**

Exhibit 10

- Total growth
  - West +350 million tons
  - Interior +35 million tons
  - Appalachia -2 million tons
- Western impact
  - 80% of West is PRB = 280 million tons
- BNSF impact
  - + 26 trainloads per day

# Substantial New Investments Will Be Needed To Meet Growing Demand

Exhibit 11

- Capacity investment (\$ millions)
  - Track/terminal \$500 - \$800
  - AC locomotives \$1,000 - \$1,200
  - Aluminum trainsets \$1,200 - \$1,300
- **Total \$2,700 - \$3,300**

**BNSF**  
**RAILWAY**

**Hearing Before the Surface Transportation Board  
April 26, 2005**

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**Ex Parte 657**

**RAIL RATE CHALLENGES UNDER THE  
STAND-ALONE COST METHODOLOGY**

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**Statement of  
Samuel M. Sipe, Jr.**

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I am Samuel M. Sipe, Jr. I am a partner in the law firm of Steptoe & Johnson, LLP. As the Board is aware, I represent BNSF Railway Company in several rate reasonableness cases that are pending before the Board. I am appearing here today on behalf of BNSF to urge the Board promptly to convene a formal rulemaking proceeding to address its current application of the stand-alone cost methodology. The rulemaking proceeding should consider modifications to existing SAC standards to make them consistent with the policies and economic principles underlying the *Guidelines*. I will also identify the specific issues that should be considered in such a rulemaking proceeding. An attachment to my written statement contains a brief summary of those issues and a proposed schedule for the rulemaking.

It is time for a broad review of the SAC methodology. Implementation of the *Guidelines* through 20 years of case-by-case litigation has not produced the results the ICC contemplated when the *Guidelines* were adopted. The ICC expected that the new, market-based approach it was adopting to evaluate the reasonableness of rail rates would give railroads a real prospect of attaining revenue adequacy. The ICC also expected that the *Guidelines* would promote the

private resolution of rate disputes through increased use of contracts. As a result, rate litigation was expected to decline. After 20 years, these objectives have not been met.

No Class I railroad has achieved long-term revenue adequacy. Since the Staggers Act was passed, one of BNSF's predecessor companies was deemed to be revenue adequate for one year. BNSF itself has never been found to be revenue adequate. One reason for the railroads' inability to achieve and sustain revenue adequacy is that competition in rail markets has proven to be far more pervasive than expected at the time the *Guidelines* were adopted. Competition has forced the railroads to pass through to their customers virtually all the productivity improvements made possible by the Staggers Act. In addition, case-by-case litigation of rate challenges under the *Guidelines* has produced standards that unduly limit the railroads' ability to set demand-based prices. In two SAC decisions in the 1990s, the Board prescribed rates for BNSF at the jurisdictional floor. In two recent SAC decisions involving BNSF, the Board has prescribed rates that exceed the jurisdictional floor by relatively small amounts. In these cases, the Board has ignored its own RSAM calculations, which identify rates that BNSF must charge, on average, to shippers with inelastic demand in order to achieve revenue adequacy.

The recent surge of rate litigation shows that the ICC's goal of promoting marketplace solutions to rate disputes has also not been achieved. As explained by Mr. Lanigan, uncertainties in the Board's application of the SAC test have had a chilling effect on rate negotiations and have led to more litigation. The recent cases brought against BNSF have not been about market problems or abusive prices. In most of these cases, BNSF offered to renew existing contracts at rates that were lower than the rate in effect at the end of the contract. The shippers that have brought these rate cases have rejected reasonable commercial arrangements because they were convinced by their advisors that even lower rates were possible through creative application of

the SAC test. If the Board's current application of the SAC test is encouraging litigation and discouraging marketplace solutions, then it is time for the Board to revisit its application of the SAC test.

This is an appropriate juncture for the Board to take a broad and careful look at the *Guidelines*. The *Guidelines* have now been in place for nearly 20 years and they have not been revisited since they were adopted. As Professor Kalt explains, 20 years of case-by-case litigation under the *Guidelines* have produced current standards that are not consistent with the original public policies and economic principles underlying the *Guidelines*. With demand for PRB coal transportation growing and capacity becoming tight, it is important for the Board to return to first principles in applying the SAC methodology. When the ICC adopted the *Guidelines*, it acknowledged the sophistication of the economic theories on which the *Guidelines* are based and it noted that after the agency gained experience in applying the *Guidelines*, modifications might be needed. It is time to carry out that test of experience.

BNSF urges the Board promptly to convene a formal rulemaking proceeding to consider changes to its current SAC methodology in five areas. BNSF is prepared to propose specific changes to the Board's practice in these five areas to make the SAC analysis consistent with the economic principles underlying the *Guidelines*.

**Cross-Over Traffic:** The first issue that should be addressed in a rulemaking proceeding is the Board's current treatment of cross-over traffic. Cross-over traffic is an issue of enormous significance in SAC cases, particularly those involving movements of PRB coal. The allocation of through revenue between the SARR and the residual incumbent on cross-over movements can drive the outcome of a SAC case.

The Board in its most recent *Xcel* decision correctly noted that there are two distinct issues relating to cross-over traffic that should be considered in a rulemaking. The first is whether the use of cross-over traffic is justifiable at all. The Board claims that the use of cross-over traffic is justified as a means of simplifying SAC litigation. But cross-over traffic has not been used in the recent cases to simplify the presentation of SAC evidence. It has been used aggressively by complainants to skew the results of the SAC analysis in their favor. No one has ever refuted BNSF's showing that the use of cross-over traffic can make rates that are reasonable appear to be unreasonable. In the 1986 *OPPD* decision, the ICC concluded that a complainant must show that cross-over traffic has revenue to contribute to the stand-alone railroad before that traffic can be considered in a SAC analysis.<sup>1</sup> The Board appears to have abandoned that requirement in recent cases.

The second cross-over traffic issue involves the allocation of through revenues between the stand-alone railroad and the residual incumbent. The Board has already acknowledged the incentive that complainants have to game the SAC results by taking advantage of arbitrary revenue allocation methodologies. If the Board accepts the use of cross-over traffic in a SAC analysis, it must adopt an allocation methodology that is based on valid economic principles. Stand-alone railroads that are dominated by short-haul traffic, like those posited in the recent cases, are designed only to take advantage of arbitrary revenue allocations and they produce a gross distortion of SAC results. BNSF continues to believe that the DARA methodology is an appropriate revenue allocation methodology that takes density into account. If there are other economically rational methodologies that are consistent with the economics underlying the *Guidelines*, they should also be considered.

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<sup>1</sup> *Omaha Public Power Dist. v. Burlington Northern R.R.*, 3 I.C.C. 2d 123, 144 (1986).

**Traffic Rerouting:** The Board should also address its current standards relating to traffic rerouting. The Board's case-by-case treatment of traffic rerouting has produced uncertain standards that encourage gaming. Complainants have discovered that they can manipulate rerouted traffic to create the appearance of economies of density on the SARR that are far greater than the economies of density that railroads have achieved or could reasonably expect to achieve in the real world.

The Board has adopted two tests in recent cases to determine whether traffic can be rerouted. Both tests are based on valid economic principles, but the Board's implementation of these tests is at odds with the underlying principles. The first test looks at the level of service that the SARR would provide on the rerouted traffic compared to the incumbent's existing service. The Board has properly concluded that the complainant must prove that the reroute will not result in a degradation in service. But the Board has not taken seriously that burden of proof. In the *Xcel* decision, the Board allowed the complainant to reroute the single largest movement in the stand-alone traffic group onto a longer and more congested line without any competent evidence by the complainant that existing service levels could be maintained.<sup>2</sup>

The second test focuses on the sharing of facilities rationale for traffic grouping. A complainant is allowed to group traffic with the issue traffic in a SAC test to take advantage of the same economies of density available to the defendant. But the Guidelines did not authorize complainants to create artificial densities by rerouting traffic from one real-world route onto another. The Board appeared to acknowledge this in *Duke/CSX*, where the Board clearly stated that "where traffic does not already utilize lines replicated by the SARR, the traffic may not be included in the SAC analysis absent a compelling justification that the defendant carrier should

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<sup>2</sup> *Public Service Company of Colorado d/b/a Xcel Energy v. The Burlington Northern and Santa Fe Railway Company*, STB Docket No. 42057, at 22 (served June 8, 2004).



itself be routing the traffic in this manner and that it is inefficient for it not to do so.”<sup>3</sup> But having announced the correct principle, the Board then ignored it in *Xcel* on the basis that the rerouted traffic used a few miles of the track replicated by the stand-alone railroad.

The issue of rerouted traffic is likely to assume increasing importance in future cases, and the Board needs to carry out a careful review of its standards in this area.

**Revenue Forecasts:** The Board should also revisit its treatment of revenue forecasts. Starting with the *West Texas Utilities* case in 1996, the revenue forecasts accepted by the Board have consistently overstated the traffic and revenues that would be available to the SARR. The overstatement of SAC revenues is the direct result of the Board’s failure to give full effect to the requirement in a SAC case that the complainant has the burden of proof. The Board has been willing to accept complainants’ aggressive forecasts without requiring that the complainant demonstrate that its forecasts are reasonable or realistic.

The Board’s recent approach has been to use a supposedly neutral forecast prepared by the Department of Energy’s Energy Information Administration (EIA). But there are several aspects of that forecast that make it inapplicable in SAC proceedings. Given the importance of the 20-year revenue forecast in the SAC calculations, the Board should develop a methodology through a rulemaking that produces an accurate and relevant forecast for use in SAC cases.

**Construction Costs:** The estimation of SARR construction costs is another area where case-by-case analysis has resulted in uncertain standards that do not promote the original objectives of the *Guidelines*. The first problem relates to the feasibility standard set out in the *Guidelines*. The *Guidelines* expressly state that the proponent of a SAC model must present verifiable data showing that the alternative is feasible. The Board’s treatment of SARR

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<sup>3</sup> *Duke Energy Corp. v. CSX Transportation, Inc.*, STB Docket No. 42070, at 16 (served Feb. 4, 2004).

construction costs has lost sight of this feasibility standard. The Board makes single-point estimates for a multitude of individual cost items without ever considering whether the aggregate of these single-point estimates produces a feasible or realistic estimate of the costs to construct a SARR. The Board needs to reconsider its construction cost methodology to ensure that the SAC construction cost estimates are feasible and verifiable and that they are consistent with real world experience.

The second construction cost issue relates to the concept of entry barriers. Complainants are using the Board's current entry barrier standards to avoid responsibility for costs that any entrant into a contestable market would face. It is not consistent with underlying principles of contestability to define entry barriers, as the Board does, by reference to the actual costs that the incumbent incurred when it entered the market years ago. Entry barriers are those advantages that the incumbent has because it is already in the market, such as access to unique assets needed to provide service. The Board's focus on historical costs is established in the SAC case law, but it is wrong and it should be revisited in a rulemaking proceeding.

**Adjustments to Prescribed Rates:** Finally, the Board should adopt simplified procedures for adjusting rate prescriptions to address unexpected changes in real world conditions such as changes in fuel price. With oil prices currently at over 50 dollars per barrel, railroads are paying record prices for diesel fuel. Railroads have implemented commercial mechanisms for passing through to shippers these extraordinary fuel costs. Railroads subject to rate prescriptions should have the same opportunity to recover these costs. Under current procedures, a party seeking to change an existing rate prescription based on changed circumstances must go through cumbersome and time-consuming reopening proceedings.

Simplified procedures should be adopted to allow the parties to address unexpected developments such as fluctuations in fuel price without costly litigation.

I have attached to my written comments a brief summary of the issues that BNSF requests the Board to examine in a formal rulemaking and the schedule that should apply to the rulemaking proceeding. BNSF will identify in the rulemaking proceeding specific measures that can be taken to ensure that the Board's standards are consistent with the economic principles underlying the SAC methodology. BNSF applauds the Board for seeing the need for such a comprehensive review of the SAC methodology, and BNSF urges the Board to act promptly.

## APPENDIX 1

### THE BOARD SHOULD NOTICE THE FOLLOWING ISSUES FOR COMMENT

#### A. Cross-Over Traffic

1. Whether cross-over traffic can be included in the SAC analysis consistent with the policies and economic theories, including the principle of contestability, underlying the SAC test.
2. If cross-over traffic is theoretically consistent with contestability but the actual inclusion of cross-over traffic in individual SAC cases has violated principles of contestability, what changes need to be made in treatment of cross-over traffic to assure such consistency with these principles.
3. How should the Board treat the allocation of revenue on cross-over movements to ensure compliance with the policies and economic theories underlying the SAC test and to ensure compliance with the statutory revenue adequacy standard.
4. In light of the foregoing, what principles or rules should be adopted regarding (a) inclusion of cross-over traffic in a SARR traffic group and (b) revenue allocation on cross-over movements.

#### B. Rerouted Traffic

1. Whether the inclusion of rerouted non-issue traffic in the SAC analysis can be consistent with the principle of efficient entry that is part of the contestability standard and consistent with the prohibition against cross-subsidy.
2. If inclusion of rerouted traffic is theoretically consistent with these standards but has not been so treated under the Board's decisions, what changes need to be made in the treatment of rerouted traffic to assure such consistency.
3. How should the Board treat rerouted traffic and the assignment of revenue on rerouted movements to ensure compliance with the policies and economic theories underlying the SAC test and to ensure compliance with the statutory revenue adequacy standard.
4. In light of the foregoing, what principles or rules should be adopted regarding (a) inclusion of rerouted non-issue traffic in a SARR traffic group and (b) the revenues that can be claimed on movements of rerouted non-issue traffic.

C. Revenue Forecasts

1. What evidentiary standards must the complainant satisfy in positing revenue escalation for the SARR shipper group.
2. Whether revenue forecasts developed by other government agencies, like the EIA, are appropriate for use in a SAC analysis.

D. Construction Costs

1. What methodologies are available for estimating construction costs that reconcile the complainant's ability to posit a "least cost" SARR with the requirement that the construction cost estimate be "feasible."
2. How can the Board ensure that the aggregation of numerous single-point estimates produces an overall cost estimate that is feasible and verifiable.
3. How should entry barriers be defined consistent with the principles of contestability.

E. Fuel Adjustment Mechanism

1. What procedures are available for ensuring that rate prescriptions are sufficiently flexible to deal with significant changes in operating conditions, such as short term changes in fuel price.

## APPENDIX 2

### PROPOSED PROCEDURAL SCHEDULE FOR RULEMAKING

1. The Board should promptly issue an ANOPR identifying the issues to be addressed in the rulemaking proceeding and inviting interested parties to submit specific proposals.
2. Interested parties should be given 45 days from the issuance of the ANOPR to comment; reply comments would be due 30 days after the initial comments and rebuttal comments would be due 30 days after reply comments.
3. Within 60 days of receiving reply comments, the Board should issue proposed revisions to its *Coal Rate Guidelines* on the issues addressed herein.
4. Interested parties should be given 45 days from the issuance of the proposed revisions to comment; reply comments would be due 30 days after the initial comments.
5. Within 60 days of receiving reply comments, the Board should issue final revisions to its *Coal Rate Guidelines*.

**Hearing Before the Surface Transportation Board  
April 26, 2005**

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**Ex Parte 657**

**RAIL RATE CHALLENGES UNDER THE  
STAND-ALONE COST METHODOLOGY**

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**Statement of  
Joseph P. Kalt, Ph.D.**

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My name is Joseph P. Kalt. I am the Ford Foundation Professor of International Political Economy at the John F. Kennedy School of Government, Harvard University. I also work as a senior economist with Lexecon, an economics consulting firm and a division of FTI Consulting. I am a specialist in the economics of competition and industrial organization, with particular emphasis on the regulated industries. I have provided expert testimony on numerous occasions to the STB, both in litigated disputes and in rulemaking proceedings.

I am here today on behalf of BNSF Railway Company to discuss why this is an opportune time for the Board to broadly revisit the application of the SAC methodology under the *Coal Rate Guidelines*. Even as the *Guidelines* were being promulgated by the Surface Transportation Board's ("the Board") predecessor, the Interstate Commerce Commission noted: "We realize, however, that the workability of the *Guidelines* is most appropriately evaluated in light of experience. . . . We may find, after some experience with applying the *Guidelines*, that

modifications are needed to make this approach to maximum rate regulation for coal traffic fully workable.”<sup>1</sup>

This prescient observation is now timely advice. The economic theories upon which the *Guidelines* are based are simple but sophisticated, and coal rate proceedings have pushed policy and the Board into areas of theory and evidence that arguably were not even anticipated during the development of the *Guidelines*. Over the last twenty years, the *de facto* requirement that the letter and spirit of the *Guidelines* be developed and applied through case-by-case litigation has made coal rate proceedings before the Board increasingly contentious, acrimonious, and expensive. Working out the details of sophisticated economic theories via case-by-case litigation often seems to be turning economic concepts that could undergird sound policy – “Ramsey pricing,” “attributable and unattributable costs,” “cross-subsidy,” “revenue adequacy,” and the like – into catch-phrases used as exegetical ammunition by parties, but whose meaning and concrete application are poorly understood. The Board, too, has taken note of the contentiousness of coal rate cases,<sup>2</sup> and has sought ways to hold down the burdens and expense of litigated disputes.<sup>3</sup>

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<sup>1</sup> Interstate Commerce Committee, Ex Parte 347 (Sub-No. 1), *Coal Rate Guidelines, Nationwide*, Decided August 8, 1985 (hereinafter *Coal Rate Guidelines*), at 525.

<sup>2</sup> Surface Transportation Board, STB Docket Number 42057, Decision, *Public Service Company of Colorado D/B/A Xcel Energy Company v. The Burlington Northern and Santa Fe Railway Company*, Decided June 7, 2004 (hereinafter Xcel Decision of June 7, 2004), at 28. See also, Surface Transportation Board, STB Docket No. 42072, Decision, *Carolina Power & Light Company v. Norfolk Southern Railway Company*, Decided December 22, 2003 (hereinafter CP&L/NS Decision), at 15; Surface Transportation Board, STB Docket No. 42069, Decision, *Duke Energy Corporation v. Norfolk Southern Railway Company*, Decided November 5, 2003 (hereinafter Duke/NS Decision), at 13-15.

<sup>3</sup> See, e.g., Testimony of Roger Nober Before the House Committee Transportation and Infrastructure Subcommittee on Railroads, March 31, 2004; Surface Transportation Board, Ex Parte No. 627, “Market Dominance Determinations – Product and Geographic Competition,” December 10, 1998. See also, CP&L/NS Decision at 13-14; and Surface Transportation Board,



I have been asked by BNSF to address the public policy and economic reasoning that underlies Constrained Market Pricing (CMP), and to consider whether the standards that have evolved through case-by-case litigation have remained consistent with the underlying policies and economics. I believe that a careful review of the economics of Constrained Market Pricing, and the advances in these economics since the adoption of the *Guidelines*, provide the foundations for a productive rulemaking proceeding. In the twenty years since the adoption of the *Guidelines*, the many issues presented in the course of the various ratemaking proceedings have resulted in standards that have evolved incrementally, addressing the interests of the individual parties involved in specific disputes, but resulting in an overall policy that may be diverging from promotion of the broad public interest. A proceeding now will allow the Board to consider how the economics of CMP are properly applied to contemporary concerns, such as the treatment of cross-over traffic and barriers to entry. I believe the economics that underlie the *Coal Rate Guidelines* continue to provide sound guidance for ratemaking policy that seeks to both protect the public interest and foster a healthy and competitive rail industry.

### **PROTECTING THE PUBLIC INTEREST**

The broad public interest can get lost when, as here, the details of an applicable regulatory framework must be adapted on a case-by-case basis and when the politics and process of maximum coal rate regulation pit shipper against railroad. The broader public has interests ranging from ensuring a financially sound and sustainable rail network that can lubricate a modern, continent-wide economy with efficient transportation to rail pricing that reflects the full costs to society of running trains over dangerous highway crossings and through congested cities. Yet, the broader public does not generally show up in the STB hearing rooms.

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STB Docket No. 42070, Decision, *Duke Energy Corporation v. CSX Transportation, Inc.*, Decided February 3, 2004 (hereinafter Duke/CSXT Decision), at 13-14.

Under the circumstances, the understandable tendency of even well-meaning regulators can subtly shift from promotion and protection of the public interest to minimizing conflict and finding a fair balance between the interests of the parties that do show up in the hearing rooms. "Fairness" is a laudable goal of public policy. But when the broad public's interest is not given voice in the rough and tumble of policymaking via litigation, the well-meaning "balance" that is struck can be imbalanced against the public interest, indeed.

This is especially true in an industry like railroading. The network nature of the system means that policies that engender inefficient price signals and network-wide revenue inadequacy can be wittingly or unwittingly pursued by individual shippers in their individual cases because the adverse effects of poor policy can be diffused via case-by-case incrementalism almost imperceptibly across the system and its multitude of shippers. And the extremely long-lived capital of the railroad industry can allow years of incremental policymaking that is inconsistent with the public interest to persist without showing up as the kind of stark system-wide decay and crisis that might eventually bring the broader public into the hearing rooms.

Sound coal ratemaking policy is now at a premium. As discussed by BNSF's witness, Mr. John Lanigan, demand for Powder River Basin coal is strong and is expected to continue to grow. Little excess capacity is available to handle increasing demand, and the supply-demand balance of the coal transportation marketplace is putting upward pressure on efficient market prices. Proper policy recognizes the critical role that market-determined prices play in this situation – signaling where supplies are scarce and providing incentives for investment in capacity expansion.

Rate litigation that is used to keep rates artificially low even when demand is high is understandably sought by individual shippers, but is inconsistent with the public's interest in

efficient use and growth of the rail network. At the extreme, artificially low prices result in the need for rationing – a nightmare for any regulator who has ever had to take over the market's function of deciding who gets service and who does not. Over the long run, artificially low prices that reject the need to bring supply and demand into balance usually create the eventual need for even higher prices, as demand is artificially spurred while capacity expansion is choked off. In light of the *public* interest, the Board needs to ensure that it is not applying SAC tests in a way that inhibits the railroads' ability to react efficiently and rationally to current market conditions.

#### **PROMOTING THE ECONOMIC PRINCIPLES UNDERLYING THE GUIDELINES**

It is important at this time to remind ourselves of the economic principles that underlie Constrained Market Pricing and its implementation through Stand Alone Cost analysis. CMP and the *Coal Rate Guidelines* arose directly from the intersection of economic and policy necessities. CMP directly attacks problems of monopoly abuse by using the principles of a competitive marketplace to establish maximum rates for market-dominant service while allowing differential pricing across services and customers. Both are appropriate in a network industry like rail transportation.

As instructed in the *Coal Rate Guidelines*, the principles of CMP are derived from the economics of "contestability" and are to be implemented through the technique of Stand Alone Cost analysis of rate reasonableness.<sup>4</sup> The use of these principles arises out of the economic profession's focus on assessing and promoting the broad, national public interest in a healthy economy. I would like to address briefly the twin economic principles of differential pricing and

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<sup>4</sup> *Coal Rate Guidelines* at 528-9.

contestability, and to consider the extent to which the Board's current standards have remained consistent with these principles.

**Differential Pricing:** Since the inception of the Staggers Act, which first explicitly allowed railroads to use differential pricing, such pricing has frequently been the focus of shippers, railroads, and regulators. The high fixed costs and capital intensive nature of the rail industry make differential pricing a necessity that both the Staggers Act and the *Guidelines* recognize. In order for railroads to recover their fixed costs and sustain the levels of capital investment necessary to maintain their networks, they must have the ability to offer different customers different prices based on individual customers' alternative transportation options and customers' resultant willingness to pay for rail transportation. The alternative, pricing at variable cost for all customers, would lead to under-recovery of costs and result in the long-run decay of the industry. In order to have economically viable railroads in the long-run, implementation of CMP must allow for meaningful differential pricing.

The Board's SAC decisions generally do not discuss the issue and implications of differential pricing. It is reasonable to assume that the shippers appearing before the Board in individual rate cases are among those shippers with the greatest demand for rail service. BNSF has submitted evidence in recent cases on the demand elasticity of the shippers. Shippers with inelastic demand should be paying relatively high rates for transportation consistent with the theory of differential pricing – referred to as “Ramsey Pricing” in the *Guidelines*. The Board's rate prescriptions in recent cases involving PRB coal transportation suggest that the Board has not been willing to apply the *Guidelines* in a way that gives real meaning to the railroads' need to engage in differential pricing. PRB coal rate prescriptions in the past decade have been much closer to the jurisdictional threshold of 180% revenue to variable cost than to RSAM, which is

the amount that needs to be charged on average to inelastic customers so that the railroad can attain revenue adequacy.

**Contestability:** The *Guidelines* also embrace the economics of contestability as the applicable framework for limiting coal rates under conditions of market dominance. The *Guidelines* are fully cognizant that the railroad industry does not actually satisfy the conditions needed for actual contestability (*i.e.*, absolutely free entry and exit).<sup>5</sup> At the same time, they recognize that the economics of contestability can be applied in properly conducted rate inquiries *as if* entry and exit were completely unimpeded. As the *Guidelines* put it, under CMP and its tool of implementation, SAC analysis, “rates will be judged against *simulated* competitive prices.”<sup>6</sup> The “simulated” competitive prices are those that would result if incumbents had to face entrants who are unimpeded by barriers to entry or exit. Under such conditions, incumbents’ prices (rates) would not be able to exceed the stand alone costs of an efficient entrant. If they did, the entrant would enter and the incumbent would suffer the consequences.

One indication that the Board has moved away from the economic principles of contestable markets is seen in the rules that have evolved for defining entry barriers. The Board treats as a “barrier to entry” any type of cost that a new entrant would have to incur that was not actually incurred by the incumbent railroad – perhaps a century or more ago. This standard is consistent with the Board’s view that the SARR is a replacement for the incumbent carrier that steps into the incumbent’s shoes for a segment of the rail system. But it is not consistent with contestability, which properly treats both the incumbent and the SARR as facing neither barriers to entry nor exit *today*. Current real world costs that would be incurred are not a barrier to entry

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<sup>5</sup> *Coal Rate Guidelines* at 529.

<sup>6</sup> *Coal Rate Guidelines* at 542 (emphasis added). See, also, *Coal Rate Guidelines* at 529.

because, in a contestable market, they are borne by both the SARR and the contestable incumbent.<sup>7</sup> Excluding certain costs from the SARR's SAC because they were not incurred or were incurred in the form of a different technology a century ago artificially reduces SAC rates and resulting rate prescriptions. Shippers are then shown rates that fail to reflect the full cost to society of providing them service. Such subsidization of shippers is the epitome of economic inefficiency.

The case law has also strayed from the behavior-based standard of incumbents and SARRs competing ("contesting") on equal footing that was contemplated in the *Guidelines'* adoption of contestability theory. The SAC analysis framed by the *Guidelines* was supposed to ask the question: Under the hypothetical conditions of contestability, what rates can we predict would occur as the consequence of the rational economic behavior of incumbents and entrants locked in a free entry/exit contest to be the serving railroad? This framing of what SAC analysis should be about compels the regulatory process to confront the increasingly salient question arising in rate proceedings: What kinds of SARRs would rational new entrants design in order to compete in the face of putatively excessive rates on challenged traffic? The answer is that SARR's would design – and price – efficient systems that would stand a chance of "winning" the competitions of a contestable market. Instead of asking these behavior-based questions and generating the answers that flow from the economics of contestability, SAC cases have become dominated by arbitrary rules for attributing and allocating responsibility for joint and common costs. As a result, recent cases have seen SARRs that are implausible vehicles for entry into a rail market and that appear to be designed only to take advantage of the arbitrary cost allocation rules.

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<sup>7</sup> See George Stigler, "Barriers to Entry, Economies of Scale, and Firm Size," in *The Organization of Industry*, Richard D. Irwin, Homewood, IL (1968).

**Cross-Over Traffic:** As illustration of the foregoing, the greatest challenge for the Board in implementing the *Guidelines* in a way that is consistent with the underlying economics is in the treatment of cross-over traffic. The trend in recent cases before the Board has been for complainants to design SARRs that overwhelmingly depend on cross-over traffic for their revenues. For example, in several recent cases (Duke/NS, Duke/CS and Xcel/BNSF), cross-over traffic has accounted for 85-90% of total SARR traffic. Such an overwhelming reliance on cross-over traffic is inconsistent with the notion of *stand alone* service of the challenged traffic, and the railroads have argued that such traffic should be excluded from the analysis unless a methodology consistent with the economics of the underlying SAC analysis can be found and consistently applied. This argument is compelling: With the design of the proposed SARRs largely at the discretion of the complainants, railroads have reason to be concerned that SARRs will be designed and revenue misallocated on cross-over traffic in ways that violate statutory requirements by preventing revenue adequacy of incumbent carriers and that ultimately contradict the guides to the public interest that emanate from the economics embodied in the original *Guidelines*.

The difficulty created for SAC analysis by cross-over traffic lies in the fact that railroads are *networks*. What happens on one part of the system can materially affect the value and operation of other parts of the system. The network character of a railroad means that, in a very real sense, a SARR carrying cross-over traffic can generally be expected to be "using" (*i.e.*, deriving value from) the joint and common costs of the entire network of the incumbent to which it is connected and in which it is embedded. The same can be said of the value of SARR's services and facilities to cross-over shippers. Indeed, this mutual dependence is the core of what it means for costs to be unattributable, joint and common costs.

Thus, proper revenue allocation is at the core of disputes raised over cross-over traffic. While the SARR is free to design and offer customers virtually any system it wants in the marketplace, the economics of contestability do not mean that a SARR is free of all constraints that control the manner and form in which it competes. If the SARR wins the competition for the issue and cross-over traffic, meeting shippers' demands for full movements means that the market still needs at least portions of the incumbent's network. To be viable as an outcome of the simulated competition, the SAC results must allow an efficient residual system the realistic opportunity to be revenue adequate. This is a necessary result of contestability: If a railroad (SARR or residual incumbent) does not earn adequate revenues to cover its costs, it will not enter and provide service to shippers. If the residual incumbent is not viable, the SARR that needs the residual system service to satisfy its customers is not viable.

In its implementation of SAC procedures regarding cross over-traffic, the evolving nature of case-by-case litigation has led to precedent that now effectively ignores the economics of this interdependence when establishing rules for allocating revenue for cross-over traffic. Instead, SAC methodologies have come to rely on arbitrary pronouncements regarding revenue allocations. These over allocate cross-over revenue to the SARR and create incentives for gaming the regulatory process. The enunciation of allocation rules has thwarted development of an economically coherent framework for analyzing cross-over traffic and has distorted results of SAC tests by leaving residual incumbents that would not be revenue adequate. It seems to me that the time is right for the Board to step back and take a concerted look at this and related elements of its coal ratemaking policies as they now stand. I would look forward to addressing the economics at issue with the rigor that a rulemaking before the Board would allow.